4. (Amended)

Popula

The method of claim 2, wherein the plant in which recombination is induced is selected from the group consisting of: soybean; maize; sugar cane; beet; tobacco; wheat; barley; poppy; rape; sunflower; alfalfa; sorghum; rose; carnation; gerbera; carrot; tomato; lettuce; chicory; pepper; melon; Arabidopsis; and cabbage.

18. (Amended)

A recombination construct which can be induced to undergo homologous recombination upon introduction of a maize transposase comprising direct repeat sequences proximal to a Ds element and an agronomically significant gene internal to the direct repeats.

21. (Amended)

The recombination construct of claim 18, which further comprises a transposase gene under control of an inducible promoter.

Please add new claims 24-35 as follows:

24. (New)

The method of claim 3, wherein the recombination construct further comprises an agronomically significant gene internal to the direct repeats.

25. (New)

The method of claim 24, wherein the agronomically significant gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.

26. (New)

The method of claim 3, wherein the recombination construct further comprises a transposase gene under the control of an inducible promoter.

27. (New)

The method of claim 3, wherein the transposase is Ac.

28. (New)

The method of claim 26, wherein the transposase is Ac.

29. (New)

The method of claim 4, wherein the plant in which recombination is induced is maize.

30. (New)

overlapping sequences having homologous regions, which sequences, when homologously combined, result in a gene.

31. (New)

The method of claim 1, wherein the plant is a monocot.

32. (New)

The method of claim 1, wherein the plant is a dicot.

33. (New)

The method of claim 30, wherein the gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.



34. (New)

The recombination construct of claim 21, wherein the transposase is Ac.

35. (New)

54 The recombination construct of claim 18, wherein the gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.